REMARKS

Claims 1 to 20 are all the claims pending in the application, prior to the present Amendment.

Claims 19 and 20 have been rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Applicant has canceled claims 19 and 20. Accordingly, this rejection is moot.

Claims 1-20 have been rejected under 35 U.S.C. 112, second paragraph, as indefinite. The Examiner sets forth a number of reasons for this rejection.

The Examiner states that the phrase "converted to crosslinked" in claims 1 and 19 is unclear, and that this rejection may be overcome by deleting "converted to" in the last lines of claims 1 and 19. In response, applicant has amended claim 1 as proposed by the Examiner. As noted above, applicant has canceled claim 19.

With respect to the rejection of claim 19 being unclear because of the terms "polymer blocker" and "radial polymerization," as noted above, applicant has canceled claim 19.

Applicant has amended claim 7 to recite "radical" polymerization, in accordance with the original description.

With respect to the Examiner's assertion that claims 1-18 are unclear because it cannot be ascertained if a molded material is being claimed or if a mere characteristic (reaction of epoxy and anhydride groups) inherent when molding tales place is being claimed, applicant has amended claims 1 to 12, 15 and 17 to recite a molded article, and have amended claim 18 to refer to the molded article.

In view of the above, applicant submits that the claims comply with the requriemtns of the second paragraph of 35 U.S.C. § 112 and, accordingly, requests withdrawal of this rejection.

Claims 1-16 and 19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Goetz et al (US 2003/0100675).

Applicant submits that Goetze et al do not disclose or render obvious the presently claimed invention and, accordingly, requests withdrawal of this rejection.

The present invention as set forth in claim 1 as amended above is directed to a molded article, comprising an acrylic block copolymer (A) which comprises a methacrylic polymer block (a) and an acrylic polymer block (b), wherein at least one of polymer blocks among the methacrylic polymer block (a) and the acrylic polymer block (b) has an acid anhydride group and/or a carboxyl group, and an acrylic polymer (B) having 1.1 or more of epoxy groups in one molecule, wherein the acid anhydride group and/or the carboxyl group is reacted with the epoxy group at molding, and the acrylic block copolymer (A) is crosslinked.

The significance of the present invention exists in the combination of the acrylic block copolymer (A) having the acid anhydride group and/or the carboxylic group and the component (B) having the epoxy group. This combination improves molding flowability since the component (B) acts as a plasticizer at molding. At the same time, the acid anhydride group and/or the carboxylic group is reacted with the epoxy group, thereby the acrylic block copolymer (A) is crosslinked.

As a result of the crosslinking reaction, a molded article having improved heat resistance property is obtained. See page 7, lines 21-24, page 36, lines 5-14, page 40, lines 19 to 20, and page 50, lines 2 to 4 of the present specification.

Example 7 well supports the above-mentioned surprising and unexpected result of the present invention: the improvement in heat resistance and moldability, namely powder slush molding property. Comparative Example 2, in which the sample composition contains the

acrylic polymer (A) having an analogous monomer structure to Example 7, but no cross-linking reaction is carried out, can keep the moldability. However, the heat resistance property according to Comparative Example 2 is inferior to that of the present invention.

Comparative Example 5 shows good heat resistance property by having a high molecular weight in advance. However, the moldability is inferior to that of the present invention.

Goetz et al do not disclose or suggest the above-mentioned technical feature of the present invention that the acid anhydride group and/or the carboxylic group is reacted with the epoxy group at molding, and the acrylic block copolymer (A) is crosslinked.

Therefore, it would not have been obvious to a person of ordinary skill in the art to expect the inventions according to the amended claims in view of Goetz et al.

In the Office Action, the Examiner seems to misunderstand the difference between the Examples and Comparative Examples of the present specification. The Examiner says that "carboxyl groups in block copolymers in the comparative examples appear to be generated on terminal blocks" and that "the comparative examples only contain carboxyl". See page 6, lines 13 to 18 of the Office Action. However, the acrylic block copolymer (A) in Comparative Examples 2 and 5 can not have any carboxyl group since there is not a TBA (tert-butyl acrylate) or "tertiary" which is essential for forming an acid anhydride group or a carboxylic group. See Preparation Example 10 in which the polymers of Comparative Examples 2 and 5 are prepared. The Examiner seems to misunderstand that a BA (butyl acrylate) can convert to a carboxyl group. In addition, the transformation reaction in order to form an acid anhydride group or a carboxylic group is also essential. See Preparation Example 4 in which the polymer of Example 7 is prepared. There is no transformation reaction in Preparation Example 10 leading to Comparative Examples 2 and 5.

In view of the above, applicant submits that Goetze et al do not disclose or render obvious the presently claimed invention and, accordingly, requests withdrawal of this rejection.

Claims 1-20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/092696 to Kaneda et al in view of Goetz et al, cited above, and either Nakashima et al (US 6,576,691) or Kawakubo et al (US 5,976,289).

The Examiner states that WO '696 corresponds to US 2004/0147674 (Kakeda et al) which he refers to since it is in English.

Applicant submits that WO 02/092696, Goetze et al, Nakashima et al and Kawakubo et al do not disclose or render obvious the presently claimed invention and, accordingly, request withdrawal of this rejection.

Goetz et al and WO 02/092696 do not disclose or suggest the above-mentioned technical feature of the present invention that the acid anhydride group and/or the carboxylic group is reacted with the epoxy group at molding, and the acrylic block copolymer (A) is crosslinked.

Nakashima et al merely disclose a powder slush molding technology, and Kawakubo et al merely disclose a skin for automobile interiors. These references do not disclose or suggest the above-mentioned technical feature of the present invention.

As can be seen from the above discussion, all of the cited references do not disclose or suggest the technical feature of the present invention, "the acid anhydride group and/or the carboxylic group is reacted with the epoxy group at molding, and the acrylic block copolymer (A) is crosslinked".

Therefore, it would not have been obvious to a skilled person in the art to expect the inventions according to the amended claims in view of the cited references.

In view of the above, applicant submits that WO 02/092696, Goetze et al, Nakashima et al and Kawakubo et al do not disclose or render obvious the presently claimed invention and, accordingly, requests withdrawal of this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

Sheldon I. Landsman

Sheldon I. Landsman
Registration No. 25,430

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860
WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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